

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: DEUEL, Thomas, F. et al. Examiner: EYLER, Yvonne, L.

Patent No.: 6,448,381

Group Art Unit: 1646

Issued: September 10, 2002

For: DNA ENCODING HEPARIN BINDING  
GROWTH FACTORS

Attorney Docket: 60019620-0003

Commissioner for Patents  
Attn: Decisions & Certificate of Correction Branch  
P.O. Box 1450  
Alexandria, VA 22313-1450

CONF  
#310  
EJ  
Certificate  
MAY 14 2004  
of Correction

**REQUEST FOR CERTIFICATE OF CORRECTION**

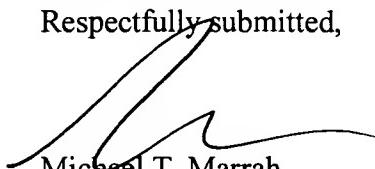
Sir:

Transmitted herewith is a proposed Certificate of Correction for the above-captioned Letters Patent.

This application was filed on June 21, 1990, with 7 claims. Amendment A filed on August 19, 1991, withdrew claims 1-3 and amended claims 4-7. The Examiner's Amendment mailed September 28, 1995, canceled claims 1-3 and amended claims 4 and 6. Accordingly, Patentee respectfully requests that a Certificate of Correction be issued to reflect that U.S. Patent No. 6,448,381 consists of 4 claims (i.e., original claims 4-7).

Patentee submits that the errors set forth in the proposed Certificate of Correction were made by the Patent and Trademark Office and no fee is due.

Respectfully submitted,

  
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23142663V-1

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**UNITED STATES PATENT AND TRADEMARK OFFICE**

**CERTIFICATE OF CORRECTION**

PATENT NO : 6,448,381

DATED : September 10, 2002

INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

The title should be replaced with "DNA ENCODING HEPARIN BINDING GROWTH FACTORS."

In Column 1, line 55, delete ":" which appears after ";" and before "Zhan."

In Column 5, nucleotide 314 should be changed from "d" to "G."

In Column 5, line 62, the extra space which appears after "ity" should be removed.

In Column 10, line 6, add ":" between "7.0" and "About."

In Table II, HBGF8 should be replaced with "95% GLY-LYS-LYS-GLU-LYS-PRO-GLU-LYS-LYS-VAL-LYS-LYS-SER-ASP-CYS-GLY-GLU-TRP-GLN-TRP-SER-VAL-CYS-VAL-PRO."

In Column 10, line 57, add a space after "5299" and before "(1979)."

In Column 12, line 23, replace "Thr" with "Ala"; replace "Pro" with "Gln"; and replace "Leu" with "Gln."

In Column 12, line 41, replace "Asp" with "Glu."

In Column 12, line 43, replace second "Ser" with "Pro."

In Column 12, line 48, add "purified and isolated" before "cDNA" and after "The" and replace "bovine" with "human."

MAILING ADDRESS OF SENDER:

SONNENSCHEIN NATH & ROSENTHAL  
PO Box #061080, Wacker Drive Station-Sears Tower  
Chicago, Illinois 60606-1080

PATENT NO. 6,448,381

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The sequence of Claim 2 should read:

GTCAAAGGCA	GGATCAGGTT	CCCCGCCTCC	CAGTCCAAAA	ATCCCGCCAA	50
GAGAGCCCCA	GAGCAGAGGA	AAATCCAAG	TGGAGAGAGG	GGAAGAAAGA	100
GACCAGTGAG	TCATCCGTCC	AGAAGGCAGG	GAGAGCAGCA	GCAGGCCAAG	150
CAGGAGCTGC	AGCGAGCCGG	GTACCTGGAC	TCAGCGGTAG	CAACCTCGCC	200
CCTTGCAACA	AAGGCAGACT	GAGCGCCAGA	GAGGACGTTT	CCAACTCAAA	250
AATGCAGGCT	CAACAGTACC	AGCAGCAGCG	TCGAAAATT	GCAGCTGCCT	300
TCTTGGCATT	CATTTTCATA	CTGGCAGCTG	TGGATACTGC	TGAAGCAGGG	350
AAGAAAAGAGA	AACCAGAAAA	AAAAGTGAAG	AAGTCTGACT	GTGGAGAATG	400
GCAGTGGAGT	GTGTGTGTGC	CCACCAGTGG	AGACTGTGGG	CTGGGCACAC	450
GGGAGGGCAC	TCGGACTTGA	GCTGAGTCCA	AGCAAACCAT	GAAGACCCAG	500

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AGATGTAAGA TCCCCTGCAA	CTGGAAGAAG	CAATTGGCG	CGGAGTGC	AA 550
ATACCAGTTC CAGGCCTGGG	GAGAATGTGA	CCTGAACACA	GCCCTGAAGA	AA 600
CCAGAACTGG AAGTCTGAAG	CGAGCCCTGC	ACAATGCCGA	ATGCCAGAAG	AA 650
ACTGTCACCA CTCCCAAGCC	CTGTGGCAAA	CTGACCAAGC	CCAAACCTCA	AA 700
AGCAGAACATCT AAGAAGAAGA	AAAAGGAAGG	CAAGAAACAG	GAGAAGATGC	AA 750
TGGATTAAAA GATGTCACCT	GTGGAACATA	AAAAGGACAT	CAGCAAACAG	AA 800
GATCAGTTAA CTATTGCATT	TATATGTACC	GTAGGCTTG	TATTCAAAAA	AA 850
TTATCTATAG CTAAGTACAC	AATAAGCAAA	AACAAAAAGA	AAAAAAAAAAA	AA 900
AAAAAAAAAAA	AAAAAAAAAAA	AAAAAAAAAAA	AAAAAAAAAAA	AA 950
AAAAAAAAAAA A				AA 961

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INVENTOR(S) : DEUEL, Thomas, F. et al.

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Add Claim 3 as follows:

3. A purified and isolated DNA sequence consisting of a sequence encoding bovine heparin binding growth factor of 168 amino acids having the following amino acid sequence:

Met Gln Thr Pro Gln Tyr Leu Gln Gln Arg Arg Lys Phe Ala Ala	15
Ala Phe Leu Ala Phe Ile Phe Ile Leu Ala Ala Val Asp Thr Ala	30
Glu Ala Gly Lys Lys Glu Lys Pro Glu Lys Lys Val Lys Lys Ser	45
Asp Cys Gly Glu Trp Gln Trp Ser Val Cys Val Pro Thr Ser Gly	60
Asp Cys Gly Leu Gly Thr Arg Glu Gly Thr Arg Thr Gly Ala Glu	75
Cys Lys Gln Thr Met Lys Thr Gln Arg Cys Lys Ile Pro Cys Asn	90
Trp Lys Lys Gln Phe Gly Ala Glu Cys Lys Tyr Gln Phe Gln Ala	105
Trp Gly Glu Cys Asp Leu Asn Thr Ala Leu Lys Thr Arg Thr Gly	120
Ser Leu Lys Arg Ala Leu His Asn Ala Asp Cys Gln Lys Thr Val	135
Thr Ile Ser Lys Pro Cys Gly Lys Leu Thr Lys Ser Lys Pro Gln	150
Ala Glu Ser Lys Lys Lys Lys Glu Gly Lys Lys Gln Glu Lys	165
Met Leu Asp	168

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It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Add Claim 4 as follows:

4. The purified and isolated cDNA of bovine heparin-binding growth factor having the following nucleotide sequence:

GAGTGGAGAG	AGTAGAAGAA	AGAGAGCAGG	GAGTCACCGG	GCGTGCAGGG	50
GCGGAGAGCA	GCAGGCCGCCG	CGAGCACCCAG	CGACTTGCGGT	ACCTGGACTC	100
AGGGCAGAAA	AACCTCTCCC	GGATCAACAA	AGGCAGCCTG	AGCGCGCACC	150
GCTCTTTGC	GACTCCAAA	TGCAGACTCC	ACAGTACCTG	CAGCAACGTC	200
GAAAATTGCG	AGCTGCCCTT	TTGGCATTAA	TTTCATCTT	GGCAGCTGTG	250
GACA <del>C</del> CGCTG	AAGCAGGAAA	GAAAGAGAAA	CCAGAAAAGA	AGGTGAAGAA	300
GTCTGACTGT	GGAGAATGGC	AGTGGAGTGT	GTGTGTACCA	ACCAGTGGGG	350
ACTGTGGGCT	GGGCACCCGC	GAGGGCACCC	GTACCGGAGC	TGAGTGTAAA	400
CAAACCATGA	AGACCCAGAG	ATGTAAGATC	CCCTGCAACT	GGAAAAAGCA	450
ATTTGGAGCG	GAGTGCAAT	ACCAGTTCCA	GGCCTGGGGA	GAATGTGATC	500
TGAACACGGC	TCTGAAGACC	CGAACTGGGA	GCCTGAAGCG	AGCCCTCCAC	550
AACGCCGACT	GCCAGAAAGAC	AGTCACCATC	TCCAAGCCCT	GTGGCAAGCT	600
GACCAAGTCC	AAACCTCAAG	CAGAATCTAA	GAAGAAGAAA	AAGGAAGGCA	650

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AGAAACAGGA	GAAGATGCTG	GACTAAAAGC	CACCACCTTC	CGTGGACCAT	700
GAAAAGGACA	TCAGCAAACA	CGATCAGTTA	ACTATTGCAT	TTATATCTAC	750
CGTAGGCTTT	TTATTCAAAA	ATTATCTATA	GCTTAAGTAC	ACAATAGGCA	800
GAAACAAAAT	GAAAAGAAAAA	ATTTTGTAGT	AGCATTTTT	TTAAATGTAT	850
CAATATACCA	TAGTACCACT	AGGGACTTAT	AATAGAGGAC	TGTAATCCTA	900
TTTAGAATGT	TGACTTATAG	TACATGTTAA	GTGATAGAAA	ACTGAGGTAA	950
GTTTTTGAA	GTTATGTGAT	ATTTTACATT	ACATTTTTT	TTACATTTT	1000
TTCTTTGGC	AGCAATTAA	ATGTTATGAC	TATGTAACACT	ACTTCTCTTG	1050
TTAGGTAATT	TTTTCACCT	AGACTTTATT	TCCCAATTGA	GAAAAATATC	1100
TACTAACAA	AGCAGCAATA	AAATATGATC	ATCCTATCTG	AGGAAAATAT	1150
CTCTTTCT	GCCAGTGGAT	TTTAAAAAA	TTGTAGTCAA	CAAAAT	1196

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